	14 DATP				21 DATP				28 DATP				35 DATP				63 DATP			
	3(Hb+)	C	4(Hb-)	44(Hb-)	3(Hb+)	C	4(Hb-)	44(Hb-)	3(Hb+)	C	4(Hb-)	44(Hb-)	3(Hb+)	C	4(Hb-)	44(Hb-)	3(Hb+)	C	4(Hb-)	44(Hb-)
Yield Components																				
Root Yield (grams)	0.08a	0.07a	0.09a	0.06a	0.19a	0.14b	0.13b	0.16ab	0.30a	0.23ab	0.21b	0.24ab	0.58a	0.35b	0.45b	0.34b	4.19ab	3.52b	4.94a	3.62ab
Shoot:Root	2.81a	2.24ab	1.85b	2.25ab	3.10a	2.35b	2.18b	2.50b	4.09a	2.54c	2.81c	3.22b	4.09a	3.31b	3.36b	3.43ab	4.14a	4.29a	3.25b	4.14a
Leaf:Stem	1.30b	1.72a	1.58a	1.51ab	1.11c	1.75a	1.43b	1.45b	0.93b	1.17a	1.31a	1.16a	0.76b	0.98ab	0.99ab	1.19a	0.49c	0.69b	0.83a	0.91a
Yield per Shoot (grams)	0.08a	0.04b	0.03b	0.03b	0.09a	0.05b	0.04b	0.04b	0.07a	0.04b	0.05b	0.04b	0.09a	0.04b	0.05b	0.05b	0.36a	0.19b	0.16b	0.14b
Stem Characteristics																				
Total Stem Length (cm)	28.20a	26.37a	26.37a	20.47a	59.30ab	48.27ab	39.83b	63.85a	148.77a	97.58b	91.77b	124.93ab	273.35a	226.17a	245.70a	209.03a	-	-	-	-
Stems per Plant	3.33b	4.00ab	4.67a	5.17a	7.33b	6.83b	6.83b	11.50a	16.83ab	14.50b	13.67b	19.17a	25.33a	28.00a	30.83a	24.33a	46.00c	78.17b	100.83a	104.67a
Mean Stem Length (cm)	9.30a	5.68b	5.25b	5.16b	8.57a	6.72ab	5.99b	5.68b	8.72a	6.70b	6.74b	6.70b	10.71a	8.10b	7.89b	8.76b	-	-	-	-
MIL (cm)	1.53a	0.98b	0.84bc	0.80c	1.46a	1.22b	0.94b	0.92b	1.63a	1.31b	1.05c	1.06c	1.94a	1.47b	1.18c	1.30c	-	-	-	-
Nodes per Plant	18.83c	26.83ab	33.33a	24.33bc	41.17b	40.83b	42.00b	68.67a	90.33ab	74.00b	86.83b	117.00a	141.17b	153.83b	206.67a	180.17b	-	-	-	-
Nodes per Stem	6.01a	5.74a	6.55a	6.14a	5.81a	5.98a	6.36a	6.122a	5.36b	5.11b	6.43a	6.19a	5.53b	5.50b	6.67a	6.71a	-	-	-	-
Stem Diameter (mm)	0.94a	0.72b	0.63b	0.62b	1.10a	0.78b	0.80b	0.77b	1.05a	0.77b	0.82b	0.85b	1.15a	0.78b	0.80b	0.84b	-	-	-	-
SSW (g cm^{-1})	3.42a	2.26b	2.37b	2.36b	4.84a	2.68b	2.99b	2.57b	4.33a	2.75b	2.94b	2.87b	4.88a	2.53c	3.06b	2.52c	-	-	-	-
Leaf Characteristics																				
Leaf Area per Plant (cm^2)	27.40a	21.68ab	23.01ab	17.80b	69.53a	47.51b	44.12b	58.12ab	129.74a	69.51c	78.25bc	98.42b	223.66a	114.49c	156.08b	129.42bc	-	-	-	-
Area per Leaf (cm^2)	1.09a	0.74b	0.67b	0.64b	1.40a	1.02b	0.79bc	0.67c	1.44a	0.94b	0.74c	0.77bc	1.45a	0.82b	0.68c	0.63c	-	-	-	-
SLW (cm^2 g^{-1})	4.43a	4.75a	4.27a	4.07a	4.47a	4.28a	3.78b	4.07ab	4.55a	4.46ab	4.27ab	4.09b	4.47a	4.82a	4.66a	4.61a	-	-	-	-
Trifoliates per Plant	24.83b	28.67ab	36.17a	27.00b	51.00b	46.33b	59.33b	87.33a	90.50bc	74.00c	107.67ab	126.67a	158.50bc	140.17c	249.33a	189.17ab	-	-	-	-
Reproductive																				
MSC	0.7	0.0	0.0	0.0	1.5	0.5	0.7	0.7	2.0	1.0	1.0	1.0	2.8	1.3	1.5	1.3	4.3	1.8	1.8	1.1
Days to First Flower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47.3b	59.5a	54.4a	58.5a
Racemes per Plant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	81.00a	28.17b	57.33ab	36.50b
Florets per Raceme	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.5a	11.0a	11.0a	10.5a

Different Letters within harvests represent significant differences at (P≤ 0.05) according to Fishers LSD test
MIL = Mean Internode Length, SLW = Specific Leaf Weight, MSC = Mean Stage by Count
MSC calculations: 14,21,28,35 DATP (longest stem), 72 DATP (whole plant)

FIGURE 1

Title: METHOD OF MODIFYING PLANT PHENOTYPES WITH NONSYMBIOTIC HEMOGLOBIN
Inventor(s): Robert D. Hill
DOCKET NO.: 049280-0102

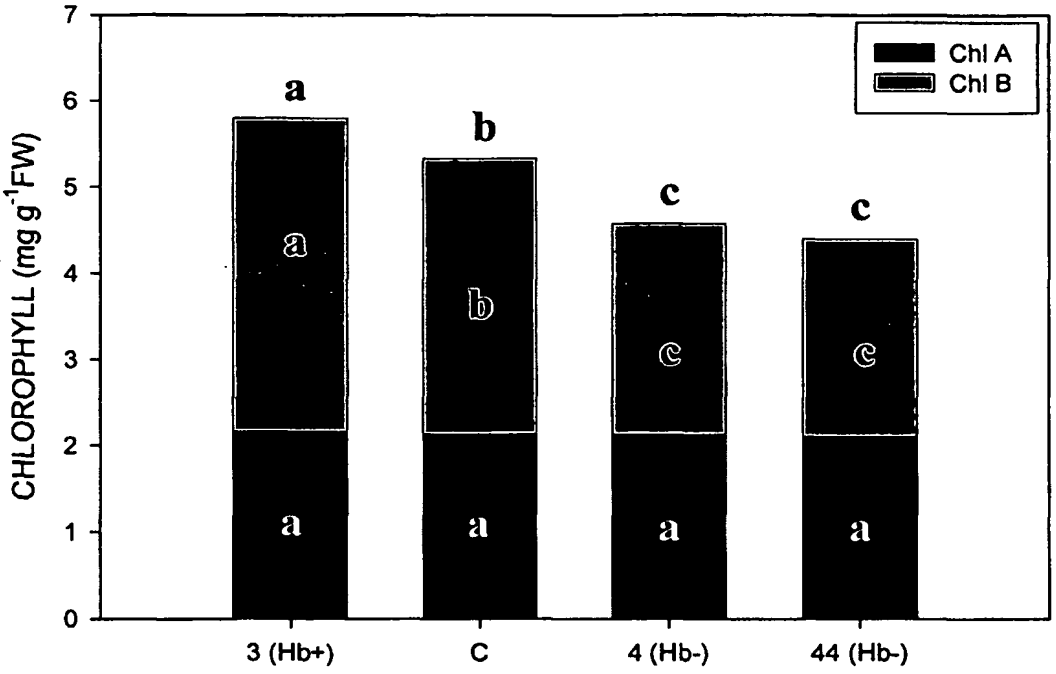

FIGURE 2

Title: METHOD OF MODIFYING PLANT PHENOTYPES WITH NONSYMBIOTIC HEMOGLOBIN
Inventor(s): Robert D. Hill
DOCKET NO.: 049280-0102

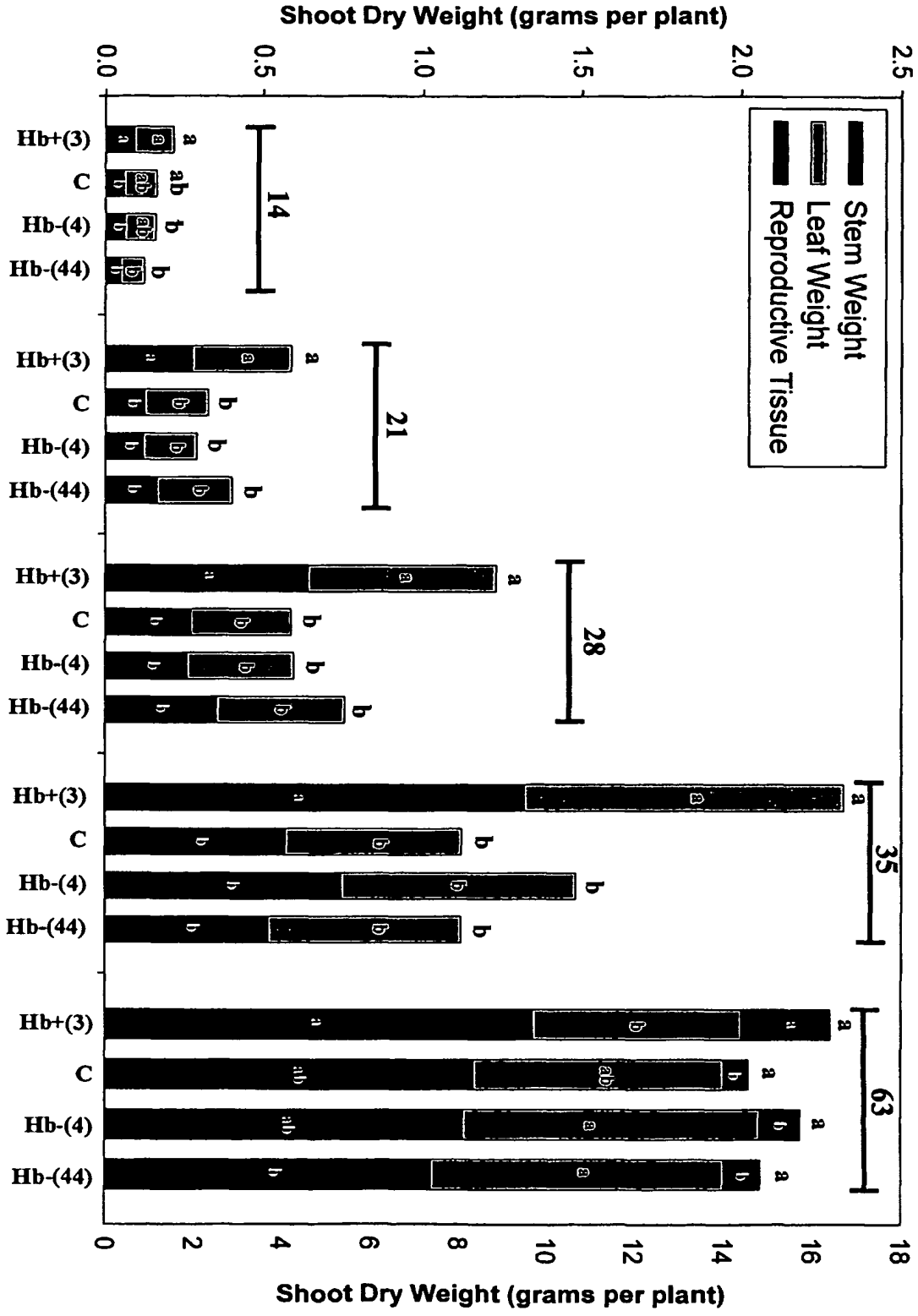

FIGURE 3

Title: METHOD OF MODIFYING PLANT PHENOTYPES WITH NONSYMBIOTIC HEMOGLOBIN
Inventor(s): Robert D. Hill
DOCKET NO.: 049280-0102

Shoot Morphology

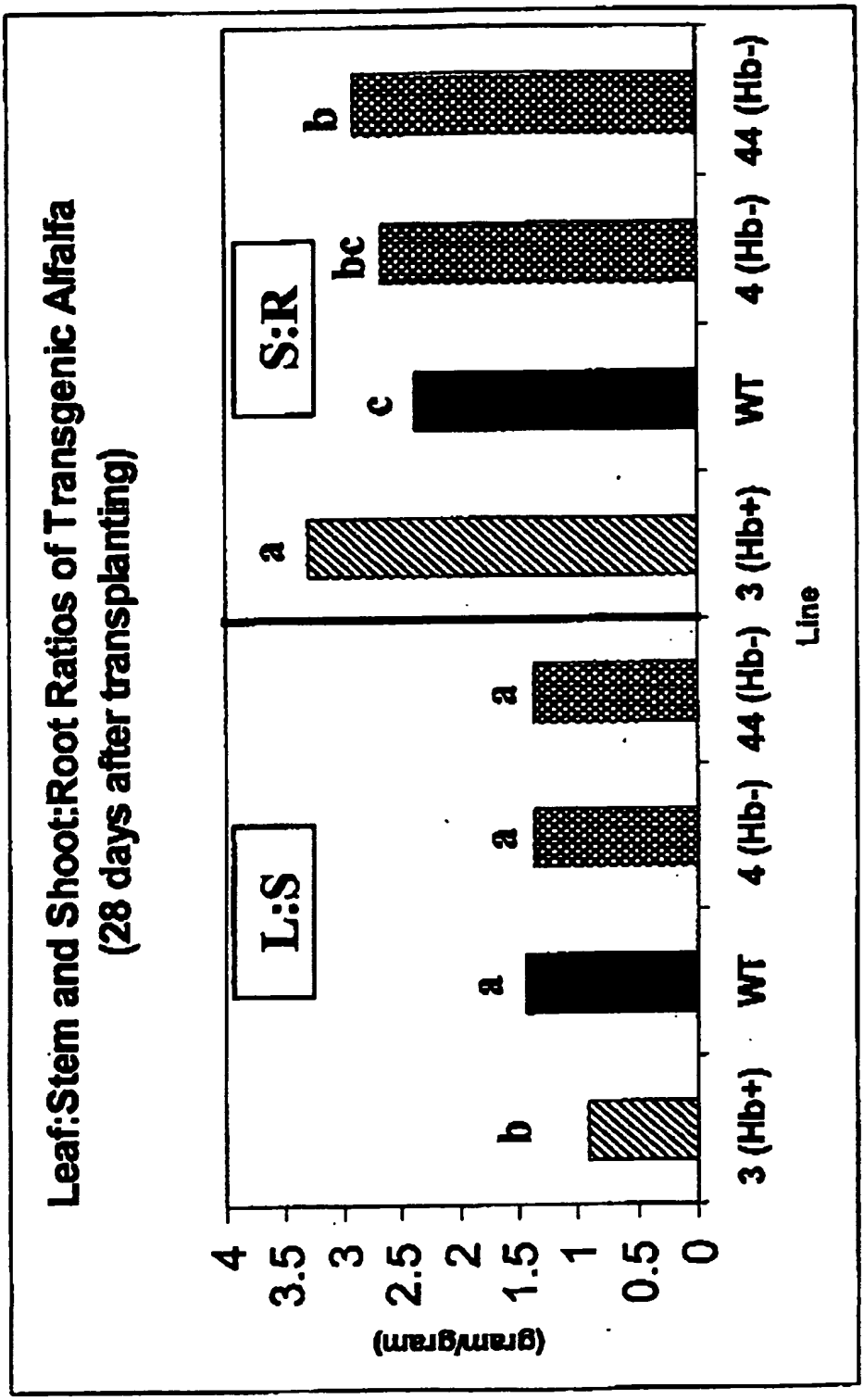

FIGURE 4

Title: METHOD OF MODIFYING PLANT PHENOTYPES WITH NONSYMBIOTIC HEMOGLOBIN
Inventor(s): Robert D. Hill
DOCKET NO.: 049280-0102

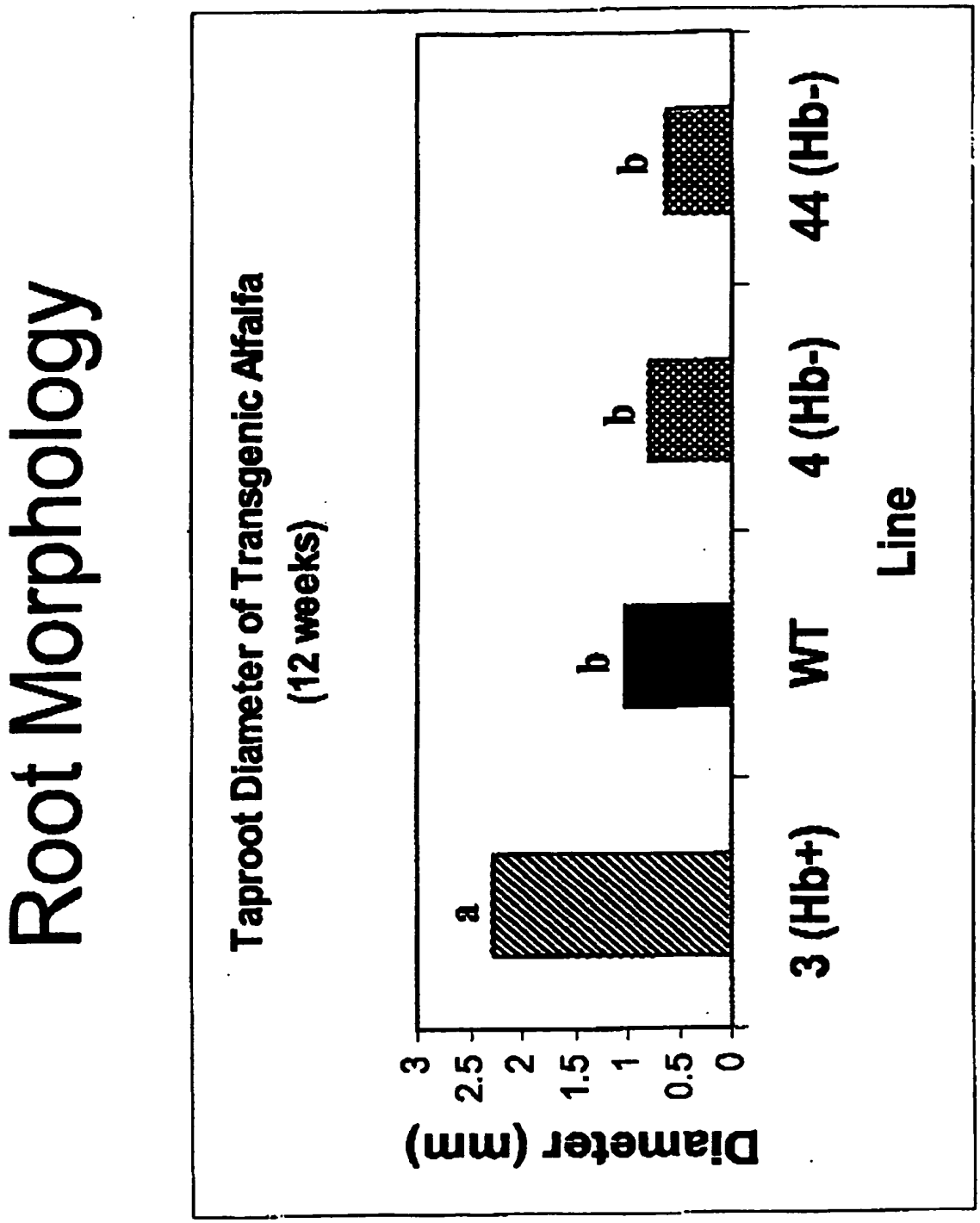

FIGURE 5

Title: METHOD OF MODIFYING PLANT PHENOTYPES WITH NONSYMBIOTIC HEMOGLOBIN
Inventor(s): Robert D. Hill
DOCKET NO.: 049280-0102

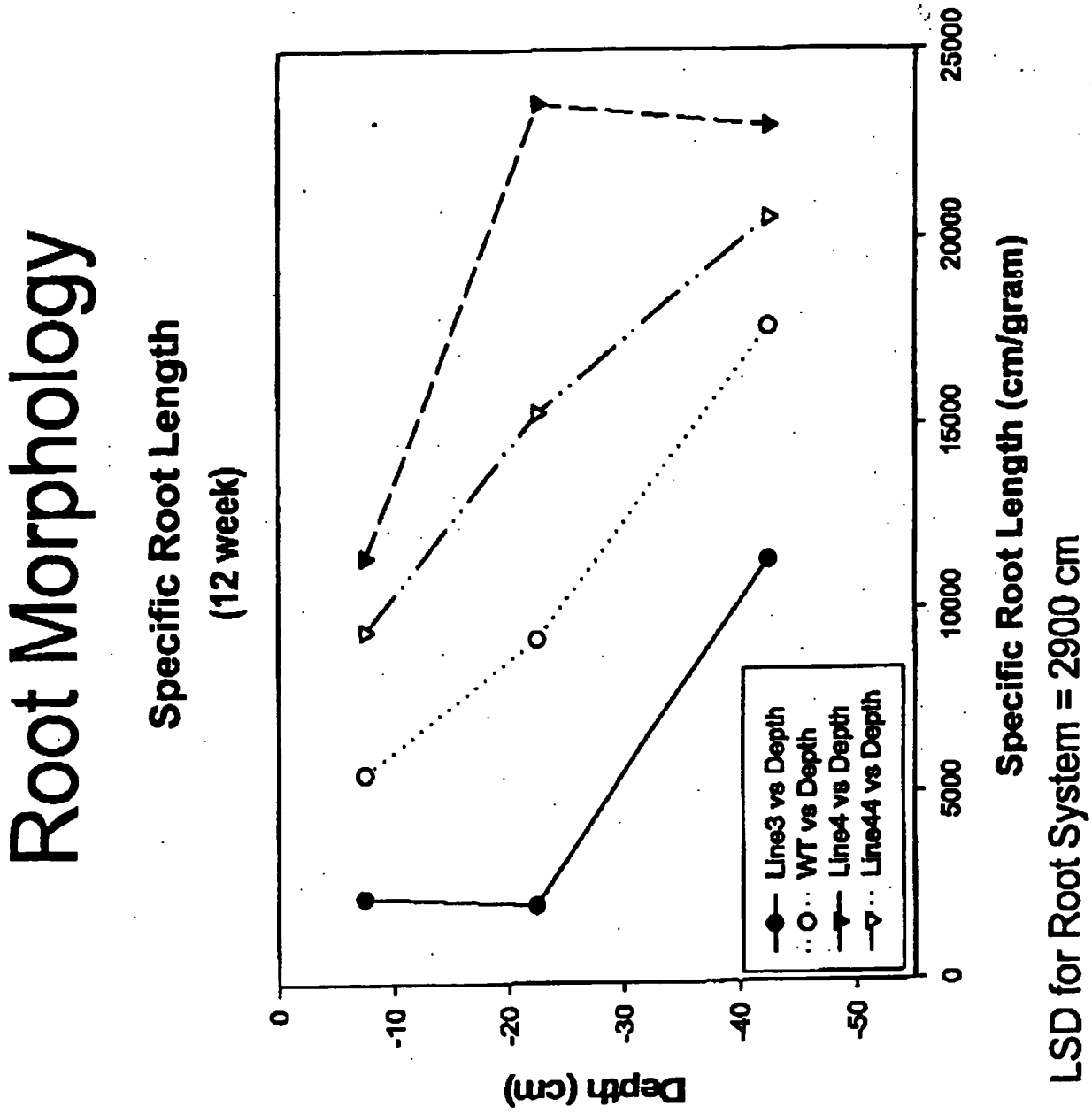

FIGURE 6

Title: METHOD OF MODIFYING PLANT PHENOTYPES WITH NONSYMBIOTIC HEMOGLOBIN
Inventor(s): Robert D. Hill
DOCKET NO.: 049280-0102